

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-18. (canceled)

19. (currently amended) A method of manually centering, in a rim ~~(200)~~ of a spectacles frame, an ophthalmic lens ~~(103)~~ that is provided with at least one center and/or axis marking ~~(PC)~~, the method comprising the steps ~~consisting in~~ of:

a) for calibration purposes, acquiring and storing ~~[[the]]~~ a shadow of an opaque sign ~~(124A, 124B)~~ formed on a transparent sign support ~~(124)~~ interposed between lighting means ~~[[S]]~~ and acquisition means ~~[[C]]~~ while said support is being illuminated on its own by said lighting means;

b) superposing said ophthalmic lens and said transparent sign support;

c) acquiring and storing the shadow of said opaque sign of said support as ~~detected~~ deflected by said ophthalmic lens while said ophthalmic lens and said support are being illuminated together by said lighting means;

d) using the acquisition means ~~[[C]]~~ to acquire ~~[[the]]~~ a shadow of the center and/or axis marking ~~(PC)~~ of the ophthalmic lens ~~(103)~~ for centering while it is illuminated by said lighting means and superposed on said transparent sign support;

e) displaying on a display screen ~~(105)~~ visible to an operator firstly the shadow of the center and/or axis marking ~~(PC)~~ of the ophthalmic lens ~~(103)~~, and secondly a virtual centering target ~~(CC)~~ corresponding to ~~[[the]]~~ a position desired for the center marking ~~(PC)~~ of the lens ~~(103)~~ relative to a reference point ~~(CB)~~ of the rim ~~(200)~~ of the frame;

f) from the prismatic deflection of the opaque sign ~~(124A, 124B)~~ as measured by comparing the acquisitions of steps a) and c), deducing a corrected relative position ~~(CBe)~~ for the reference point ~~(CB)~~ of the frame rim ~~(200)~~ relative to the center marking ~~(PC)~~, or vice versa; and

g) putting the shadow of the centering marking ~~(PC)~~ of the ophthalmic lens ~~(103)~~ into coincidence with the centering virtual target ~~(CC)~~.

20. (currently amended) ~~[[A]]~~ The centering method according to claim 19, ~~characterized in that~~ wherein steps c) to f) are performed in a loop after performing steps a) and b), so as to continuously obtain a corrected relative position ~~(CBe)~~ for the reference point ~~(CB)~~ of the frame rim ~~(200)~~.

21. (currently amended) ~~[[A]]~~ The centering method according to claim 20, ~~characterized in that~~ wherein in step c), the shadow of the outline of the ophthalmic lens ~~(103)~~ for centering is acquired and in step d) there is displayed on the

display screen ~~(105)~~ firstly said shadow of the outline of the lens ~~(103)~~ and secondly a virtual image ~~(200)~~ representative of the corresponding rim of the frame, being offset independently of the reference point ~~(CB)~~ of said frame rim relative to the centering virtual target ~~(CC)~~ associated with said frame rim in order to compensate for the prismatic deflections induced by the lens ~~(103)~~ for centering.

22. (currently amended)     [[A]] The centering method according to claim 19, ~~characterized in that~~ wherein steps d) and e) are performed in a loop, following steps a) and b), and steps c) and f) are performed after step g).

23. (currently amended)     [[A]] The centering method according to claim 19, ~~characterized in that~~ wherein in step e), there is displayed on the display screen ~~(105)~~, firstly directly from the acquisition and analysis means ~~[(C)]~~, the shadows of the ophthalmic lens ~~(103)~~ for centering, of the center and/or axis marking ~~(PC)~~ of said ophthalmic lens ~~(103)~~, and of the opaque sign ~~(124A, 124B)~~ while it is being activated, and secondly the centering virtual target ~~(CBe)~~, the opaque sign ~~(124A, 124B)~~ of the transparent sign support ~~(124)~~ being activated intermittently for a duration that is short enough to ensure that the human eye does not perceive its shadow on the display screen.

24. (currently amended) [[A]] The method of centering and blocking an ophthalmic lens, the method comprising centering said lens using the method according to claim 19, and depositing a handling peg at a predetermined location on said ophthalmic lens, account being taken of the corrected position ~~(CBe)~~ of the reference point ~~(CB)~~ of the frame rim ~~(200)~~ as calculated in step f).

25. (currently amended) [[A]] The centering and blocking device for implementing the method according to claim 24, the device comprising:

- receiver means ~~(121, 114)~~ for receiving the ophthalmic lens ~~(103)~~;

- on either side of said receiver means, firstly lighting means ~~[[S]]~~ for illuminating the ophthalmic lens ~~(103)~~ installed on said receiver means, and secondly acquisition and analysis means ~~[[C]]~~ for acquiring and analyzing the light transmitted through said ophthalmic lens; and

- a transparent support ~~(124)~~ including an opaque sign representing a geometrical figure presenting a maximum outside dimension lying in the range 2 mm to 10 mm, that is activatable and deactivatable, and that is disposed between said receiver means and said acquisition and analysis means.

26. (currently amended) [[A]] The device according to claim 25, ~~characterized in that~~ wherein the geometrical figure ~~(124B)~~ occupies an area lying in the range 3 mm<sup>2</sup> to 80 mm<sup>2</sup>.

27. (currently amended) [[A]] The device according to claim 25, ~~characterized in that~~ wherein the geometrical figure ~~(124B)~~ is of a shape that is different from a point or a cross, being suitable for being distinguished visually from a marking on the ophthalmic lens.

28. (currently amended) [[A]] The device according to claim 25, ~~characterized in that~~ wherein the geometrical figure ~~(124B)~~ is a polygon, ~~preferably a triangle~~.

29. (currently amended) [[A]] The device according to claim 25, ~~characterized in that~~ wherein the geometrical figure is a circle or an oval.

30. (currently amended) [[A]] The device according to claim 25, ~~characterized in that~~ wherein said receiver means, said lighting means, said acquisition and analysis means, and said transparent sign support are held stationary relative to one another.

31. (currently amended) [[A]] The device according to claim 25, ~~characterized in that it~~ wherein the device includes a single optical path between said lighting means ~~[[S]]~~ and said acquisition and analysis means ~~[[C]]~~.

32. (currently amended) [[A]] The device according to claim 25, ~~characterized in that~~ wherein said transparent sign support ~~(124)~~ is a transparent active screen suitable for selectively displaying the geometrical figure.

33. (currently amended) [[A]] The device according to claim 32, ~~characterized in that~~ wherein said transparent screen is a liquid crystal screen.

34. (currently amended) [[A]] The device according to claim 25, ~~characterized in that~~ wherein said transparent sign support comprises a regular array of repeated opaque patterns.

35. (currently amended) [[A]] The device according to claim 34, ~~characterized in that~~ wherein said transparent sign support comprises a Hartmann matrix.

36. (new) A method of manually centering an ophthalmic lens in a rim of a spectacle frame, said ophthalmic lens having

at least one of a center marking and an axis marking, the method comprising the steps of:

a) for calibration purposes, acquiring and storing a shadow of an opaque sign formed on a transparent sign support interposed between a light source and an acquisition device while the support is being illuminated by the light source;

b) superposing the ophthalmic lens and the transparent sign support;

c) acquiring and storing the shadow of the opaque sign of the transparent sign support as deflected by the ophthalmic lens while the ophthalmic lens and the transparent sign support are being illuminated together by the light source;

d) using the acquisition device to acquire a shadow of at least one of the center marking and the axis marking of the ophthalmic lens while the ophthalmic lens is illuminated by the light source and superposed on the transparent sign support;

e) displaying on a display screen visible to an operator the shadow of at least one of the center marking and the axis marking of the ophthalmic lens, and a virtual centering target corresponding to a position desired for the center marking of the ophthalmic lens relative to a reference point of the rim of the frame;

f) from the prismatic deflection of the opaque sign as measured by comparing the acquisitions of steps a) and c), deducing a corrected relative position for the reference point of

the frame rim relative to a center marking, or deducing a corrective relative position for the reference point of the center marking relative to the frame rim; and

g) making coincident the shadow of the center marking of the ophthalmic lens with the virtual centering target,

wherein the opaque sign is a closed geometrical figure.

37. (new) The device according to claim 28, wherein the polygon is a triangle.